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ABSTRACT

This study was conducted to determine the accuracy of the commonly cited claims that teacher certification graduates are inferior to noncertification graduates in terms of entrance and exit criteria. Popular literature and conventional wisdom have apparently influenced state legislatures to enact legislation which places limits on the professional component of teacher education programs, Scholastic Aptitude Test scores, Grade Point Average (GPA) in the general education core, and overall GPA were obtained for all teacher certification students who matriculated at Berry College and completed a teacher education program. The teacher certification students were compared to a systematic sample of all other graduates for the time period 1985-1989. The review of literature and data obtained from this study do not support the assertion that teacher education graduates are inferior academically to their peers in other programs. Berry College teacher education graduates were equal to, or better than, nonteacher certification students in all areas. The conclusion was that legislative intrusion is unnecessary and counterproductive in most cases. (JD)

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A Study Comparing Academic Achievement between Teacher Certification and Non-teacher Certification Students at Berry College

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A paper presented at the spring meeting of the Georgia Association of Colleges for Teacher Education, Macon.
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ABSTRACT

This study was conducted to determine if the widespread belief and subsequent popular literature that teacher certification candidates were inferior to non-teacher certification candidates in terms of entrance and exit criteria from programs is accurate. This literature has influenced state legislatures to enact legislation which places limits on the professional component of teacher education programs.

This study looked at all teacher certification students who matriculated at Berry College and completed a teacher education program and a systematic sample of all other graduates over a five year period. Mean SAT scores, GPA in the general education core, and overall GPA were calculated.

Our review of the literature did not support the popular literature and this study was no different. Our study found that teacher certification students were equal to, or better than, non-teacher certification students in: 1) SAT scores, 2) GPA in the general education core, and 3) overall GPA.

We concluded that legislative intrusion is unnecessary and counterproductive in most cases.

INTRODUCTION

During the past decade, we have heard an almost endless repetition, from commissioned reports such as those produced by The National Commission on Excellence in Education (A Nation at Risk, 1983), The Holmes Group (Tomorrow's Teachers, 1986), and The Carnegie Task Force on Teaching as a Profession (A Nation Prepared: Teachers for the 21st Century, 1986), that most educational woes can be traced to poor teacher quality or poor preparation of teachers. This notion has been popularized by the print and electronic media as well as some professional literature.

A commonly held view is that teacher education candidates do not perform well in non-education or non-major related coursework. Bills in many state legislatures propose to cap the number of hours in professional education. These bills are a response to the litany of criticisms of teacher education and teacher education students. It is the authors' opinion that these criticisms are based on misinformation at best and no information at worst. Several studies conducted during the 1980s provide evidence that students preparing to be teachers perform at levels comparable to their non-education counterparts.

Nelli (1984) analyzed data from secondary education majors and their non-education counterparts in academic disciplines at the

University of Kentucky. Results of the study seem to refute charges that teacher education graduates are academically inferior to non-education graduates. A similar study conducted at Illinois State University examined percentile ranks and GPAs for teacher education and non-teacher education graduates. Grades in classes taken by both groups of students were analyzed; the courses selected had high enrollments and were considered representative of coursework taken by teacher education and non teacher education students. The teacher education group had a mean GPA of 2.78 as compared to 2.70 for the non- teacher education group. The teacher education group had a higher mean GPA in 12 of 20 courses; non-teacher education majors outscored the teacher education majors seven times, and in one course, the groups tied. (Barger, Barger & Rearden, 1988). Other studies (Matczynski, Siler, McLaughlin, & Smith, 1988 and Krockover, Mortlock, & Johnson, 1987) came to similar conclusions. Apparently, many of the early reports on teacher education examined entry data into college rather than exit data or they relied on conjecture.

A study conducted in North Carolina (Agnes and Bennett 1981) provided evidence that college faculty characteristics may be the most important influence on student achievement. Agnes and Bennett found that degrees obtained by liberal arts faculty were most strongly related to differing achievement rates.

Limited documentation exists indicating that teacher education majors do not perform at similar levels as their non-teacher education counterparts (Maxwell 1986). There is no conclusive evidence, however, indicating that education majors or teacher certification students are functioning at the so called "bottom of the barrel" at all institutions. Therefore, it is inadviseable to enact reactionary legislation convicting all teacher preparation programs in a state before these programs have an opportunity to produce evidence regarding the characteristics of students entering and graduating from the program.

To determine how Berry College teacher preparation graduates compared to the overall student body, a study was conducted to compare the performance of 1985-89 teacher preparation graduates with a sample of non-education graduates for each graduating class. In addition to exiting characteristics of the students, SAT scores on entry to college were also obtained.

METHODOLOGY

The records of all students enrolled and completing a degree program at Berry leading to teacher certification under approved program criteria were analyzed. The GPA in general education, overall GPA, and SAT scores were recorded. Data from non-teacher education graduates were obtained by systematic sampling from the entire list of the graduation class. Every third name was chosen. If the name of a teacher education graduate or transfer student was selected, the data was not used and the next name on the list was selected. This operation was all done manually since the software available was not capable of accomplishing the task.

Mean GPA in general education (Appendix A), overall GPA, and SAT scores on entry were calculated manually and appear in Tables 1,2, and 3. Table 4 shows the sample size for each year.

DATA ANALYSIS

For three of the five years studied, the GPA of teacher education students exceeded the GPA of non-teacher education students in the general education core (Table 1). In all five years, the overall GPA of teacher education students was higher (Table 2). In three of four years, the combined SAT entry score of teacher education students was higher than their non-teacher education counterparts. SAT data for the 84-85 year was not available (Table 3). Table 4 shows the sample size for each group.

CONCLUSIONS

This study was conducted at Berry College, a moderately selective, small liberal arts college. Teacher education (early childhood and middle grades) comprises the second largest group of majors with business being largest. If secondary education minors are included, education contains the largest group of students on campus. Findings of this study should only be generalized to similar schools.

From the data we can conclude that Berry College graduates who major or minor in education, and are certified to teach in Georgia, are: 1) as well or better prepared as their counterparts when they enter college; 2) equal to or better than their counterparts in academic achievement in the general education core; and 3) equal to or better than their counterparts in overall academic achievement.

Since this and other studies do not support the notion that teacher education programs and teacher education students are inferior to non-teacher education programs and students, legislative intrusion is not necessary and may in fact be counterproductive.

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TABLE 1

Average GPA (General Education)

	Teacher	Non-Teacher
1984-85	2.63	2.60
1985-86	2.61	2.86
1986-87	2.82	2.75
1987-88	2.86	2.60
1988-89	2.71	2.91

TABLE 2

Average GPA (Overall)

	Teacher	Non-Teacher
1984-85	2.91	2.90
1985-86	3.13	2.90
1986-87	3.07	2.98
1987-88	3.20	2.94
1988-89	3.19	3.07

TABLE 3

Average SAT (Combined)

	Teacher	Non-Teacher
1984-85	NOT AVAILABLE	
1985-86	992	871
1986-87	859	808
1987-88	954	935
1988-89	1005	1015

TABLE 4

Sample Size

	Teacher	Non-Teacher
1984-85	32	29
1985-86	25	22
1986-87	17	30
1987-88	25	29
1988-89	19	27

GENERAL EDUCATION

The courses required for the bachelor's degree at Berry College are designed to assist students in becoming literate, cultured, and creative individuals who are also responsible citizens of a democracy in a changing world. Student should learn to reason clearly and analytically, communicate effectively, make informed and morally sound choices, appreciate artistic excellence, and understand scientific inquiry and phenomena. They should also acquire that breadth of vision that comes with an historical consciousness and an awareness of cultural diversity. The proper cultivation of such a vision emphasizes the best thought and greatest achievements of humankind throughout the course of recorded history.

Because these courses are the foundation upon which all other studies are based, they should be completed during the first two years of college.

The courses in the program of general education follow:

Behavioral Sciences (3 courses totaling 9 hours)

Economics: ECO 201 or 202
Political Science: POL 211 or 217
Psychology: PSY 101
Sociology: SOC 200
Courses will be selected from three of the above four behavioral science areas.

Humanities (5 courses totaling 15 hours)

Fine Arts: ART 201 or MUS 215
History: HIS 151, 152, 205, or 206
Literature: ENG 210, 211, 213, 214, 220, or 221
Religion or Philosophy: Any 100-level course
Courses will be selected from each of the above four humanities areas.
A fifth course will be selected from one of the humanities areas.

Mathematics and Natural Sciences (3 courses totaling 11 hours)

1. Mathematics (3 hours)
   a. for liberal-arts majors not taking additional mathematics:
   a. MAT 100
   b. for early childhood and middle-grades education majors:
   b. MAT 220
   c. for all others: MAT 102 or 103* as recommended by the student's major department.
      *with satisfactory score on placement exam may be advanced to MAT 104 or MAT 201.
   d. Credit by examination is available upon request.
2. Science: Two or more laboratory courses chosen from two or more sciences - biology, chemistry, or physics.

Electives (2 courses totaling 6 hours)
Courses selected outside the student's major discipline, or the minor, of one is chosen (excluding all general degree requirements and their prerequisites).

Total (13 courses totaling 41 hours)
Additionally, the following special degree requirements must be completed:

English 101-102
Speech 203
Health and Physical Education - three courses, with no more than one from 220, 221, or 222 (221 may count as activity or classroom course, but not both). The remaining two courses must come from the list of HPE activities.